

before the  
**FEDERAL COMMUNICATIONS COMMISSION**  
Washington, D.C. 20554

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In the Matter of: )

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Amendment of Part 97 of the )  
Commission's Rules and Regulations )  
governing the Amateur Service to )  
facilitate Spread Spectrum Communications )

RM: 8737 (1-25-1996)

**COMMENTS**

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The Commission is currently considering a petition from the American Radio Relay League to facilitate growth in Spread Spectrum mode communications (SS). This commentator was present as the only ham radio publication representative when the first SS Special Temporary Authority permits were issued at the Commission's offices in Washington and reported the event in my publication as a forward step for ham radio and technology. The pioneering effort began the digital communications efforts for hams and the mode has grown from a handful of experimenters to a fair number of regular operating stations. As with other modes this growth must now be accommodated as best as possible to allow further growth and development without adverse effect on other existent modes that share the same spectrum.

This commentator agrees with the comments of the Indiana Repeater Council. This commentator is not in agreement with the ARRL position as specified in their petition for rule making. It is felt that as in the past, once again the League has failed to recognize technical concerns and band sharing concerns and has failed to present a cogent approach that would maximize the protection of existing band users while at the same time providing the needed spectrum space for SS activities.

The Indiana suggested band plan to integrate SS into an already crowded band segment is vastly superior to the ARRL's approach. The ARRL's plan would cause the SS signals to encroach into other band users long established frequency assignments and cause interference to existing stations. Those stations would then need to move their existing operations to avoid the interference that, because of long established patterns of use, generate more interference potentials and a domino effect of interference among band users would erupt. This would cause even more conflicts to arise such as the Commission is presently trying to resolve in the FM repeater portions of the band.

The Indiana plan recognizes the rights of the SS operators to integrate their operations but suggests a much better approach in order to minimize interference to other modes and band users. This commentator agrees with the concepts of minimal interference integration and with the comments of the Indiana Repeater Council regarding the selection of dwell points.

This commentator supports the growth and development of SS techniques and is in favor of the techniques proposed but agrees with the Indiana position that the integration must be on a more sound technical basis.

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## COMMENTS RE: RM 8737

Further, this commentator suggests that the Commission consider allowing the SS operators use of the 219-220 MHz band that has been set aside for exclusive use of packet stations. Currently operation on this mode exclusive band must register with the ARRL. Similarly SS users could share this spectrum with their digital "cousins" under the same plan. This spectrum is not available to other mode users and is still vastly under utilized. Now would be an opportune time to share the 219-220 MHz band between two digital modes where SS would not have to compete for spectrum with other users. This operation would be more suitable than 420-450 MHz operation because it would generate little if any interference to existing and planned uses. It would not add to occupancy of existing bands, and offer equal or better long distance communications than 440 MHz. The use of 219-220 MHz would also allow for higher power levels than are currently allowed for SS on other bands.

Equipment is equally available for SS operation on various bands and is not a consideration. Equipment for operation on 902-928 MHz is inexpensive and readily available from Part 15 suppliers.

## CONCLUSION

The ARRL petition is technically flawed and generates interference to existing operations. The Indiana proposal is technically sound, minimizes interference to existing stations and allows for better integration of Spread Spectrum operations. The addition of operation on the 219-220 MHz band would allow even better opportunities for spread spectrum operators to develop systems and techniques, in harmony with other digital modes, with better communication distances and allowance for higher power levels and provide a maximum level of protection to the spread spectrum user and other mode users. The alternative suggested within these comments and in comments filed by the Indiana Repeater Council offer a vastly superior opportunity to foster growth and development of digital spread spectrum communications in ham radio.

Therefore the ARRL petition should be denied or modified to incorporate the technical superiority of the Indiana plan.

Respectfully Submitted



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